## **Lead in Soil**

## Lead in soil is a problem.

Most people think of old paint when they hear about lead poisoning, but lead in soil can also be harmful to children. Lead in soil comes from flaking paint, years of factory pollution and leaded gasoline in cars. Lead arsenate was used as a pesticide in orchards. When lead gets in soil it does not wash away or dissolve. The only way to know if there is lead in your soil is to get it tested.



# Lead in soil can be bad for you and your children.

Children like to play in the dirt. Dirt with lead gets on their hands. Children often put their hands into their mouths. People also bring leaded dirt into the house on shoes.





Pets can also bring in leaded dirt in their fur and on their paws.

## How much lead is too much?

Soil lead levels are measured in parts per million (ppm). The US Environmental Protection Agency (EPA) has defined a soil-lead hazard as 400ppm for play areas and 1200ppm for bare soil in the rest of the yard. If you find there are high levels of lead in your yard, there are things you can do to make it safer.

## Ways to reduce lead in soil:

Before you start, REMEMBER: Do not let children help with the yard work if there is lead in the soil. Wash work clothes apart from kids' clothes and leave shoes outside. Focus on the 4 risk areas: Play Areas, Drip Zone, Walkways and Vegetable Gardens.

## 1. Play Areas

You can get rid of the soil or cover the soil so that children will not get it in their bodies. Follow these tips:

Put toys, sandboxes and swing sets in a play area that is away from the house and any other structure with old paint. Make sure you can see your children when they are outside playing.



- Cover leaded dirt.
  - Use a landscape cloth and clean gravel. Make a plastic or wooden border to keep gravel in place.
  - Plant with healthy grass.
    Sod is the best and easiest.
    You may need to prepare
    your soil first. Remember,
    a healthy lawn takes a
    lot of care. Watering is
    very important. Get
    advice from a professional before planting.
    - Bare play areas, such as those under a swing set, can also be covered with wood chips, mulch, or clean sand.





- **Provide** a sandbox.
  - Buy a container for the sand. It is cheap and easy.
  - Cover the sandbox so it stays clean.
  - Make a sandbox by digging out the top 6-8 inches of soil, placing a landscape cloth down as a barrier, building a raised wooden border and filling it with clean sand.
  - Keep away from old buildings.

## 2. Drip Zone

The drip zone is the closest 3-foot area around the house. It usually has the highest levels of lead.

Over the years, wind and rain cause paint chips to fall to the ground and mix with soil.

The best way to get rid of the danger is to have the top 8-10 inches of soil removed and taken away. This can be costly.

To keep children out of this area, you could also do one or all of the following:



Plant shrubs around the house.



Put a small fence around this area.



#### **REMEMBER:**

If the outside of your house has flaking lead paint, the soil can be polluted again.



### 3. Walkways

Dirt walkways can be a danger because they make dust and bring dirt into the house. Here are some solutions:

- Cover dirt walks with gravel. First, dig out the top 4 inches of soil and line the shallow trench with stones or wooden beams.
- Make a brick, stone or concrete walkway. You may need to hire a contractor.



## 4. Vegetable Gardens

Gardening in leaded soil can be harmful because

of the risk of getting lead on your hands and then into your mouth. If the levels in your garden are above 400ppm, young children and pregnant women should stay away from contact with the soil.





Wear gloves while working in soil. Be sure to wash hands and tools and leave gardening shoes outside your home.

Lead can also get in and on your vegetables and herbs. Plant gardens away from the house and away from traffic. Parking cars on bare soil can make dust that ends up on your vegetables.

## If you have high levels of lead in your garden, here are some tips:

Replace the top 10-12 inches with clean soil.



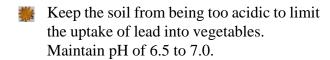
Rototill the soil with enough clean soil and compost to dilute it.



Plant in a raised bed. A raised bed is 12 inches of clean soil that is put on top of the garden area with a wooden or concrete border to keep it in. Cover the leaded soil

with a permeable landscape

fabric before you make a



raised bed.



Scrub any vegetables grown in a home garden before eating to remove soil and dust. Peel all rooted crops such as potates, carrots or beets.



Throw away outer leaves of vegetables, like lettuce and Swiss chard. High lead levels are most likely to be found in leafy vegetables.





**CAUTION:** If there is high lead in your soil, do not plant rooted vegetables such as potatoes, radishes, carrots and onions, or leafy vegetables such as lettuce or spinach. Grow vegetables that have a low risk for lead. Some plants, such as cabbage, collards, kale, tomatoes, sweet corn, squash, eggplant, and pepper or other fruiting plants, take in less lead.













800-897-LEAD

## **Landscaping Tips:**

Make a plan first. Think about who will care for the plants. Will they last? Will they grow in sun or shade? Will they make it through the winter?



Will you need to replant in the spring? Will they keep children away from the soil?



Choose shrubs and plants and thick ground covers that will keep children away from bare soil. In some situations, bushes with thorns are better than

bushes with flowers. Ask a gardener or landscaper to help you make good choices.

Remember, all landscaping will need maintenance.
Replenish mulch, water lawns and care for your yard to assure a beautiful, lead safe environment.

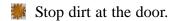




## **Other Tips:**

Here are some other things you can do to help protect children from lead in soil.





Place a rug at each entry door and wash the rug often.





Remove shoes at the door so you do not track dirt inside the house.

Keep floors clean of lead dust by washing weekly. Vacuum carpets often.

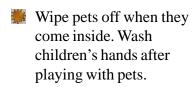


- Watch children when they are outside. Do not let them play in dirt or put dirt or dirty things in their mouths.
- Keep yard toys outside or wash them before bringing them in.





Make sure children wash their hands well after playing outside, especially before meals or snacks. Keep fingernails clean and short.





Park cars in one place, on a paved area is best. You can build a wood, stone or concrete border around that area to keep dust in. Parking cars in the yard does not let the grass grow and makes dirt and dust.



